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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,635	03/29/2007	Kinji Asamura	90606.162/ym	8621

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EXAMINER	
POTTER, WESLEY A	
ART UNIT	PAPER NUMBER
3611	

NOTIFICATION DATE	DELIVERY MODE
08/24/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/596,635	ASAMURA ET AL.	
	Examiner	Art Unit	
	WESLEY POTTER	3611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 May 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11,13-17 and 19-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11,13-17 and 19-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 June 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

An amendment was received on May 8th, 2009. The amendment has been entered; claims 1-10, 12 and 18 are cancelled, claims 11, 13-15, 17, and 20 are amended. Claims 11, 13-17 and 19-22 are pending. The objection in the prior action to claim 18 is now moot. The objections in the prior action to claims 21 and 22 have been successfully traversed and are retracted. The examiner notes that second amended section of claim 1 should have been underlined from "in a plan view," rather than from "plan view" to indicate all new text in the amendment.

Claim Objections

Claims 1 and 17 are objected to because of the following informalities: the phrase "cylindrical pump" in the second to last line of each claim should read "cylindrical pump body." Appropriate correction is required.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ootaka et al. – U.S. Patent No. 6,679,292 (henceforth cited as 'Ootaka'), Suzuki et al. – Japanese Patent Application Publication JP 2003-074436 (henceforth cited as 'Suzuki') and Kobayashi et al. – U.S. Patent No. 6,655,363 (henceforth cited as 'Kobayashi').

Regarding claims 11-16 and 21 – Ootaka teaches a mounting structure for a fuel pump of a vehicle engine the mounting structure comprising:

a fuel pump assembly (20) including a cylindrical pump body and a suction end (23) of the pump body;

a fuel tank (10) of a vehicle (col. 3, lines 58-59);

a housing (22) enclosing the cylindrical pump body, a flange section (21) of the housing arranged to abut an outside area (30) surrounding an opening (12) in a fuel tank (10); and

a mounting plate (40) arranged to cover the flange section on an outside of the fuel tank, the fuel pump assembly arranged to be fixed to the opening through the mounting plate and the flange section, wherein the mounting plate, the fuel pump assembly and the opening at least partially overlap and the mounting plate is mounted is attached to the opening.

Ootaka does not teach a filter or that the cylindrical pump body extends generally parallel to a mounting surface of the mounting plate.

Suzuki teaches a cylindrical pump body (P) with a filter (F) coupled to a suction end (PB) of the cylindrical pump body such that the longitudinal axis of the cylindrical pump body extends generally parallel to a mounting surface (T) and the cylindrical pump body and the filter are arranged to overlap each other, wherein the cylindrical pump body and the filter are spaced apart from each other in a direction normal to the axis of the cylindrical pump body and the filter is disposed below the cylindrical pump body, wherein a fuel passage includes the filter, the cylindrical pump body, and a member (4C) through which fuel flows from the filter to the cylindrical pump body and the fuel passage is arranged such that one portion of the fuel passage overlaps another portion of the fuel passage and a portion of the fuel passage (P) is arranged so as to overlap another portion of the fuel passage (F), and wherein a the cylindrical pump body and an opening (TA) where the pump is mounted at least partially overlap each other.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the pump assembly of Ootaka with an elongated pump and filter arrangement, like that taught by Suzuki, arranged such that the longitudinal axis of the cylindrical pump body extends generally parallel to the mounting surface, to accommodate a longer, narrower pump, in order to reduce the necessary width of the opening in the fuel tank make the pump compatible with a wider variety of tank styles. It is well known in the art that an intake fuel filter should be arranged toward the bottom of the fuel tank and reorienting a filter, such as that taught by Suzuki, to accommodate for various mounting locations would only require routine skill in the art. It would have been obvious to one of ordinary skill in the art at the time of invention to reorient the filter such that it is below the cylindrical pump body based upon mounting location in order to maximize the use of internal fuel tank volume.

Ootaka does not explicitly disclose that the fuel tank is arranged to straddle a body frame of a vehicle, although a frame straddling fuel tank is implied by figure 1. Ootaka does not teach an elliptical opening in a side wall of the fuel tank.

Kobayashi teaches a fuel tank (8) arranged to straddle a body frame (2) of a vehicle, wherein an opening in the fuel tank (14) for insertion of a fuel pump assembly is arranged in a side wall surface of the fuel tank, and wherein the opening has an elliptical shape and a longitudinal axis of the opening extends generally horizontally and generally parallel to the axis of the cylindrical pump body (16)

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the opening taught by Ootaka to have an elliptical shape in order to allow installation of the pump assembly suggested above in low-profile tank shapes.

Whether or not two elements overlap is not dictated by perspective the elements are viewed from. As such, overlap discussed above is valid for both a lateral side view and a plan view.

Regarding claims 17-20 and 22 – Ootaka teaches a mounting structure for a fuel pump of a vehicle engine, the mounting structure comprising:

a fuel tank (10) of a vehicle (column 3, line 59);

a fuel pump assembly (20) to be arranged within an inner space of a fuel tank (10), the fuel pump assembly including a mounting plate (40) arranged to mount the fuel pump assembly onto the fuel tank, the fuel pump further including:

a cylindrical pump body;

an opening (12) arranged in a surface of the fuel tank, wherein a longitudinal axis of the opening extends generally horizontally.

a housing (22) enclosing the cylindrical pump body, wherein a flange section (21) of the housing arranged to abut an outside area (30) surrounding the opening (12) in the fuel tank (10), and the mounting plate extends over the flange section and is attached to the opening of the fuel tank to fix the flange section to the fuel tank, wherein the mounting plate, the fuel pump assembly and the opening at least partially overlap.

Ootaka does not teach a filter or that the cylindrical pump body extends generally parallel to a mounting surface of the mounting plate.

Suzuki teaches a filter (F) attached to a cylindrical pump body (P), wherein the cylindrical pump body extends along a mounting surface (T) and the filter is arranged such that at least a portion of the filter is spaced away from the cylindrical pump body in a radial direction of the cylindrical pump body; and a fuel pipe (4C) having a first end (PB) with which the cylindrical pump body is coupled, a trunk portion of the fuel pipe bending (at reference number '4') toward the filter, and a second end with which the filter is coupled, wherein a fuel flow direction in the cylindrical pump body (generally to the left in figure 1) and a fuel flow direction in the filter (generally to the right in figure 1) are reversed from each other, wherein an opening (TA) extends generally parallel to the axis of the cylindrical pump body, and wherein the cylindrical pump body and the opening at least partially overlap each other.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the pump assembly of Ootaka with an elongated pump and filter arrangement, like that taught by Suzuki, arranged such that the longitudinal axis of the cylindrical pump body extends

generally parallel to the mounting surface, to accommodate a longer, narrower pump, in order to reduce the necessary width of the opening in the fuel tank make the pump compatible with a wider variety of tank styles. It is well known in the art that an intake fuel filter should be arranged toward the bottom of the fuel tank and reorienting a filter, such as that taught by Suzuki, to accommodate for various mounting locations would only require routine skill in the art. It would have been obvious to one of ordinary skill in the art at the time of invention to reorient the filter such that it is below the cylindrical pump body based upon mounting location in order to maximize the use of internal fuel tank volume.

Ootaka do not teach or suggest that the opening has an elliptical shape.

Ootaka does not explicitly disclose that the fuel tank is arranged to straddle a body frame of a vehicle, although a frame straddling fuel tank is implied by figure 1. Ootaka does not teach an elliptical opening in a side wall of the fuel tank.

Kobayashi teaches a fuel tank (8) arranged to straddle a body frame (2) of a vehicle, wherein an opening in the fuel tank (14) for insertion of a fuel pump assembly is arranged in a side wall surface of the fuel tank, wherein the opening has an elliptical shape and a longitudinal axis of the opening extends generally horizontally and generally parallel to the axis of the cylindrical pump body (16)

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the opening taught by Ootaka to have an elliptical shape in order to allow installation of the pump assembly suggested above in low-profile tank shapes.

Whether or not two elements overlap is not dictated by perspective the elements are viewed from. As such, overlap discussed above is valid for both a lateral side view and a plan view.

Response to Arguments

The examiner notes that the second named inventor, Torikai, was cited when referring to Japanese Patent Application Publication JP 2003-074436 in order to avoid potential confusion in discussion between Osamu Suzuki, the first named inventor of that reference, Satoshi Suzuki, an inventor in the instant application, and Mitsugu Suzuki, the first named inventor in a reference cited by the examiner on the PTO-892 included with the prior Office action. The examiner apologizes for any confusion caused by not indicating this choice in the original action and has reverted to citation by the first named inventor for discussion herein.

The objection in the prior action to claim 18 is now moot because the claim has been cancelled. The objections in the prior action to claims 21 and 22 have been successfully traversed and are retracted.

The rejection of claim 15 under 35 U.S.C. 112, second paragraph, has been rendered moot by amendment.

Applicant's arguments with respect to claims 11 and 17 and their dependent claims have been considered but are moot in view of the amendments to the claims and the new of rejection of those claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and is included on the attached PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WESLEY POTTER whose telephone number is (571)270-7818. The examiner can normally be reached on Monday-Thursday 9:30-5:00, Alternate Fridays 9:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on 571-272-6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. P./
Examiner, Art Unit 3611

/Lesley D. Morris/
Supervisory Patent Examiner, Art Unit 3611